

Grade Separated Crossings and Safety

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RECENT RAIL ACCIDENTS AT GRADE CROSSINGS

February 3: Metro North - Valhalla NY

February 23: Caltrain - Bay Area

February 24: Metrolink – Oxnard, CA



GRADE CROSSING STATISTICS – 2014*

Number of Highway-Rail Grade Crossings

- » Nationally = Greater than 38,000
- » California = 9,303

Number of Accidents

- » Nationally = 2,068 Down 1.3%
- » California = 112 Down 23%

Fatalities

- » Nationally = 239 Up 4%
- » California = 29 Down 12%

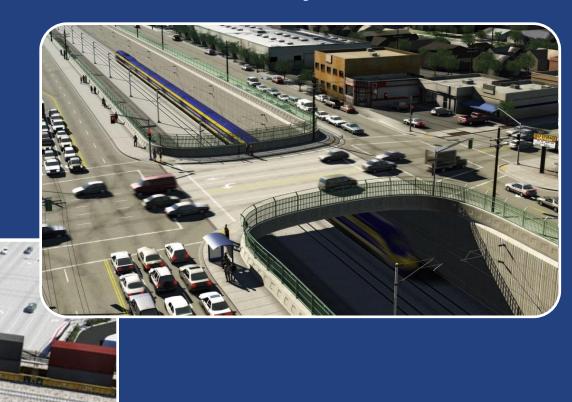


Source: FRA Office of Safety Analysis website, http://safetydata.fra.dot.gov/OfficeofSafety

WHAT IS GRADE SEPARATION?

Roadway is Re-Aligned Over or Under the Railway

Hazards are Eliminated



BENEFITS OF GRADE SEPARATION

- Benefits Include:
 - » Safety
 - » Decrease in Traffic
 - » Reduction in GHG Emissions
 - » Improved Train Operations



- Regulated by the California Public Utilities Commission (CPUC)
 - » Rail Safety Branch
 - » CPUC Sets Priority List for Grade Separations

GRADE SEPARATION: OUR LONG-TERM PLAN



GRADE SEPARATION AND SAFETY PLAN

Long-Term:

- » California's High-Speed Rail System will have No At-Grade Crossings Between San Francisco and Los Angeles
- » Over Time it Will Be 100% Grade Separated

Short-Term:

» Dedicated High-Speed Right-of-Way will have No At-Grade Crossings

» 420 Miles with Grade Separations in Phase 1

- San Jose to Los Angeles Fully Grade Separated
- » Bookends will have "Protected" At-Grade Crossings
 - Urbanized Environment
 - Complicated Design
 - Impacts to Communities & Railroad Operations

SNAPSHOT OF REGIONAL IMPROVEMENTS

Northern California:

- » Between San Jose and 4th and King: 44 Existing Grade Crossings
 - Will be Examined as Part of Environmental Review Process

Central California:

- » CP 1, CP 2-3 & CP4:
 - BNSF: 39 Existing Grade Crossings = Eliminated
 - UP: 16 Existing Grade Crossing = Eliminated
- » Major Improvements in Downtown Fresno

Southern California:

- » Key Grade Separations Included in the Southern California MOU:
 - State College, Dornan Street, Rosecrans Ave/Marquardt Ave = To Be Eliminated

GRADE SEPARATION: FRESNO IMPROVEMENTS



SAFETY IMPROVEMENTS

- Quad Gates
 - » Block All Lanes of Traffic of Both Sides of Track
 - » Gate Delay on Exit Side
 - » Possible 98% Reduction in Collisions (UC Berkeley Safe Transportation Education and Research Center)
- Intrusion Detection
- Positive Train Control (PTC)



SAFETY IMPROVEMENTS & PARTNERSHIPS

- CPUC
- Caltrans
- Operation Lifesaver
 - » http://www.caol.us/
 - » California High-Speed Rail is a Participant
- Regional Partners
- Cities, Counties and Local Governments

